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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/762,523	02/01/2001	Hideaki Machida	1022-01	4791		
35811 7	35811 7590 04/19/2004			EXAMINER		
IP DEPARTN	MENT OF PIPER RUDN	SIMONE, CA	SIMONE, CATHERINE A			
ONE LIBERTY PLACE, SUITE 4900			ART UNIT	PAPER NUMBER		
1650 MARKE				THE EXTROPOLIC		
PHILADELPH	IIA, PA 19103		1772			

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.		Applicant(s)				
Office Action Summary				MACHIDA ET AL	$\rho()$			
		09/762,523 Examiner		Art Unit				
		Catherine Simon		1772				
	The MAILING DATE of this communication app				lress			
Period fo				-				
THE - Exte after - If the - If NO - Failt Any	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, howe ly within the statutory mini will apply and will expire S a, cause the application to	ver, may a reply be time mum of thirty (30) days v SIX (6) MONTHS from th become ABANDONED	y filed will be considered timely. e mailing date of this cor (35 U.S.C. § 133).				
Status								
1)[Responsive to communication(s) filed on <u>02 F</u>	ebruary 2004.						
2a)□								
3)								
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
4)⊠ 5)□	Claim(s) <u>1 and 3</u> is/are pending in the applicate 4a) Of the above claim(s) is/are withdrate Claim(s) is/are allowed. Claim(s) <u>1 and 3</u> is/are rejected. Claim(s) is/are objected to.	wn from considera						
Applicat	ion Papers							
9)[The specification is objected to by the Examine	er.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex							
Priority (under 35 U.S.C. § 119							
a)i	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea See the attached detailed Office action for a list	ts have been receits have been receinty documents hau (PCT Rule 17.2)	ved. ved in Application ve been received a)).	n No I in this National S	Stage			
Attachmen	t(s)							
1) Notic	e of References Cited (PTO-892)	4) 🔲	nterview Summary (F	PTO-413)				
3) Infor	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	5) 🔲	Paper No(s)/Mail Date Notice of Informal Pat Other:	e ent Application (PTO-	152)			

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 1 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation "a plurality of repetitive patterns" is deemed vague and indefinite. What is meant by "repetitive patterns"? What kind or type of patterns? Clarification is requested.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Sado et al. (US 4,971,748).

Sado et al. discloses a polyimide molding of thermoplastic aromatic polyimide resin, comprising a wall defining an opening at one end and closed at an opposite end (Fig. 1, #11), and having a depth therebetween (see col. 6, line 57), wherein the wall thickness is between 0.001 mm and 0.5 mm (see col. 5, lines 43-45), wherein the thermoplastic aromatic polyimide resin has

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a glass transition temperature between 200°C and 350°C (2, lines 36-40) and has a degree of elongation at break of from 50 to 2,000% at its glass transition temperature (see col. 2, lines 40-42), wherein the polyimide molding has a plurality of repetitive patterns (see col. 2, line 43-45; for example, a corrugated sheet would have a plurality of repetitive patterns), and the molding has a longest major axis between 200 and 10,000 mm in length (see col. 6, line 58) with a depth between 0.5 and 8,000 mm (see col. 6, line 57). Regarding **claim 3**, note the wall thickness falls between 0.01 and 0.2 mm (see col. 5, lines 43-45) and the longest major axis falls between 200 and 5000 mm in length (see col. 6, line 58) with a depth falling between 1.0 and 2000 mm (see col. 6, line 57).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sado et al. (US 4,971,748) in view of Voaden et al. (EP 0 392 674).

Sado et al. discloses a polyimide molding of thermoplastic aromatic polyimide resin, comprising a wall defining an opening at one end and closed at an opposite end (Fig. 1, #11), and having a depth therebetween (see col. 6, line 57), wherein the wall thickness is between 0.001 mm and 0.5 mm (see col. 5, lines 43-45), wherein the thermoplastic aromatic polyimide resin has a glass transition temperature between 200°C and 350°C (2, lines 36-40) and has a degree of

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elongation at break of from 50 to 2,000% at its glass transition temperature (see col. 2, lines 40-42), and a longest major axis between 200 and 10,000 mm in length (see col. 6, line 58) with a depth between 0.5 and 8,000 mm (see col. 6, line 57). However, Sado et al. fails to disclose a plurality of repetitive patterns. Voaden et al. teaches that it is old and well-known in the art to have a plurality of repetitive patterns (Fig. 1c, #6) for the purpose of producing a shaped sheet of polyimide. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the polyimide sheet in Sado et al. with a plurality of repetitive patterns as suggested by Voaden et al. in order to produce a shaped sheet of polyimide.

Regarding **claim 3**, note the wall thickness falls between 0.01 and 0.2 mm (see col. 5, lines 43-45) and the longest major axis falls between 200 and 5000 mm in length (see col. 6, line 58) with a depth falling between 1.0 and 2000 mm (see col. 6, line 57).

Response to Arguments

Applicant's arguments with respect to claims 1 and 3 have been considered but are moot in view of the new ground(s) of rejection. However, in response to Applicant's argument that "Sado does not disclose, teach or suggest a plurality of repetitive patterns as shown below," it is to be noted that there is no support found in the specification for the drawing given in the Applicant's remarks showing the plurality of repetitive patterns.

There is no acknowledgement in the specification as to what the repetitive patterns are.

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Catherine Simone Examiner Art Unit 1772 April 12, 2004

HAROLD PYON
SUPERVISORY PATENT EXAMINER

4/14/64